

WHAT IS CLAIMED IS:

1. A method of reporting capability of a mobile device in order to improve a user experience, comprising:
 - 5 offering a web service that makes available a device profile from a device profile repository located within the mobile device, using a reverse hypertext transfer protocol (HTTP) binding for simple object access protocol (SOAP), and receiving enhanced content at the mobile device, the enhanced content being based at least partly upon the capability of the mobile device disclosed by the web
10 service.
 2. The method of claim 1, wherein the enhanced content comprises optimized content formatting, and wherein the mobile device is configured differently than an
15 HTTP server.
 3. The method of claim 1, further comprising the steps of:
 - changing at least one characteristic of the mobile device causing a modification of the capability of the mobile device for accepting at least one type of content format,
20 sending an update signal to the device profile located at the device profile repository within the mobile device, the update signal being indicative of the modification, and providing at least a portion of the device profile from the device profile repository upon request, via the web service.
25
 4. The method of claim 3, wherein providing the device profile from the device profile repository upon request includes:

receiving a profile inquiry signal from a server outside the mobile device,
the profile inquiry signal being a simple object access protocol (SOAP) signal asking
for at least part of the device profile; and

5 sending to the server a SOAP response message inside a request, the
response message including the part of the device profile from the device profile
repository,

 wherein the web service is provided at least for content formatting, and
 wherein the device profile comprises a user agent profile.

10 5. The method of claim 3, wherein the characteristic of the mobile device is a
hardware feature, a software feature, or an environment feature.

15 6. The method of claim 2, wherein the content formatting is distinct from content
selection, and wherein the content formatting is for adapting selected content to the
capability of the mobile device.

20 7. The method of claim 1, wherein the device profile repository is a memory module
instead of a server, and wherein the mobile device hosting the device profile
repository is configured differently from an HTTP server.

8. The method of claim 4, wherein the server is an HTTP server, and wherein the
request containing the SOAP response message is an HTTP request.

25 9. The method of claim 3, wherein providing at least a portion of the device profile is
subsequently followed by utilizing the device profile to optimize the content format,
and supplying the content in the content format to the mobile device.

30 10. The method of claim 9, wherein the utilizing and the supplying are performed by a
content server located external to the mobile device.

11. The method of claim 2, wherein the content formatting includes scaling a bitmap and adjusting a color map to fit a display.
12. The method of claim 2, wherein the content formatting includes using resampling
5 to reduce an image size or a music file size.
13. A data structure embodied in a computer readable medium, for performing the method of claim 1.
- 10 14. A mobile device for reporting capability in order to improve a user experience, comprising:
a device profile repository for making available a device profile;
a processing unit, responsive to at least part of the device profile made
available by the profile repository, for providing a device profile signal, and
15 a transceiver, responsive to the device profile signal, for transmitting said device profile signal as a web service using reverse hypertext transfer protocol (HTTP) binding for simple object access protocol (SOAP),
wherein the transceiver is also for receiving enhanced content at the mobile
device, the enhanced content being based at least partly upon the capability of the
20 mobile device disclosed by the device profile signal.
15. The mobile device of claim 14, wherein the enhanced content comprises optimized content formatting, and wherein the mobile device is configured differently than an HTTP server.
25
16. The mobile device of claim 14,
wherein the processing unit is also responsive to a change in at least one
characteristic of the mobile device that causes a modification of the capability to
accept at least one type of content format, the processing unit being configured for
30 sending an update signal indicative of the modification,

wherein the device profile repository is responsive to the update signal, and is for consequently storing an updated device profile in the device profile repository, and

5 wherein the processing unit is also responsive to a profile inquiry signal, and is for seeking the device profile from the profile repository.

17. The mobile device of claim 16,

10 wherein the transceiver is for transmitting the device profile signal as a SOAP response message inside a request, the device profile signal being a response to the profile inquiry signal that is a received SOAP signal.

18. The mobile device of claim 16, wherein the device profile comprises a user agent profile, and wherein the web service is used at least for content formatting.

15 19. The mobile device of claim 16, wherein the characteristic of the mobile device is a hardware feature, a software feature, or an environment feature.

20 20. The mobile device of claim 17, wherein the content formatting is distinct from content selection, and wherein the content formatting is for adapting selected content to the capability of the mobile device.

25 21. The mobile device of claim 16, wherein the device profile repository is a memory module instead of a server, and wherein the mobile device hosting the device profile repository is configured differently from an HTTP server.

22. The mobile device of claim 17, wherein the request containing the SOAP response message is an HTTP request.

30 23. The mobile device of claim 15, wherein the content formatting includes scaling a bitmap and adjusting a color map to fit a display.

24. The mobile device of claim 15, wherein the content formatting includes using resampling to reduce an image size or a music file size.

5 25. A system for reporting capability of a mobile device in order to improve a user experience, comprising:

a mobile device including a device profile repository, for providing a device profile signal as a web service, the device profile signal being indicative of the capability; and

10 a content server, responsive to the device profile signal, for providing enhanced content that is enhanced according to the capability of the mobile device.

26. The system of claim 25, wherein the web service is provided by reverse HTTP binding for SOAP, and wherein the capability is dynamic.

15